## GRANT RELATED DOCUMENT (GRD)

## (PART-A proforma)

(To be submitted by Principal Investigator to VGST for an Approval)

GRD No.		No. of Instalments: 1/2					
VGST Scheme (CES K-FIST (L1)/K-FIS F)		K-FIST (L1)					
Title of the project		Tribological behavio in industrial a	our of Er and dom	ngineeri nestic a	pplications		
Duration of VGST S	Scheme	3 years					
		PI Details			Co-PI Details		
Name		Dr.Girish TR	1.2	Mr Ranganath N			
Phone Number		• •	March and				
Mobile Number		9916915517	9743336296				
Email ID		girishshastrytr@ksit.	edu.in	ranganathn@ksit.edu.in			
Department		Mechanical		Mechanical			
Name and Address of the Head of the Institution (including Phone Nos. & Email)		Dr. Dilip Kumar K #14,Raguvanahalli, Kanakapura Main Road Mob: 9449639120 Email : principal@ksit.edu.in					
Total VGST Grant Sanctioned (in lakhs)							
Status of VGST	Year/Phase	Cheque No./RTGS	Date cheq	and the second states of the	Grant (Rs.in lakhs)		
grant release (Rs. in	I:		S. C. Maria				
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#### (FOR -1st Phase/Year) BUDGET ESTIMATE - NON - RECURRING EXPENDITURE (NRE): NRE UNDER Scheme\_\_\_\_\_ Procurement through E-Tendering Process - ETP (Restricted to Maximum 90%)

(Equipment/Items above Rs.1.00 lakh have to be procured through E-tendering process, which shall have to be entered in NRE - ETP)

SI. No.	Items permitted to be procured only through E-tender process	Technical Specification of Equipment	Unit Price (Rs.)	Total Unit/ Quantity required	Total Estimated Cost (Rs. in lakhs) (to be approved by VGST)
NRE 1	Pin-on-Disc		Rs. 575000	01	5.75 Lakhs
NRE 2	Work station	cerned page	Rs 100000	01	1.0 Lakhs
NRE 3		Provide this information in the concerned page			
A A		this informa			
NRE 5		Provide			
NRE 6					
			NRE - Tot	tal Amount	Rs 6.75 Lakhs

#### (FOR -1st Phase/Year) BUDGET ESTIMATE - NON - RECURRING EXPENDITURE (NRE):

NRE UNDER Scheme

Procurement through Manual Tendering Process - MIP

(Restricted to Maximum 90%) (Procurement of Equipment's/ Items below Rs. 1.00 lakh only. This is also has to be entered in NRE - MTP)

SI. No.	Items permitted to be procured only through Manual Tender process (Internal Procedure)	Technical Specification of Equipment	Unit Price (Rs.)	Total Unit/ Quantity required	Total Estimated Cost (Rs. in lakhs) (to be approved by VGST)
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### **BUDGET ESTIMATE - RECURRING EXPENDITURE (RE)**

(FOR -1st Phase/Year)

(Minimum 10% shall be allocated)

Sl. No.	ltems	Percentage of Recurring Expenditure allowed by VGST (Item Wise)	Total Estimated Cost (Rs. in lakhs) (to be approved by VGST)
RE 1	Chemicals		
RE 2	Glassware	Upto 60%	0.45 lakhs
RE 3	Plastic Ware		
RE 4	Biological Specimen		
RE 5	Electrical & Electronics spare parts/any other related items	Upto 7.5%	0.05625 lakhs
RE 6	Mechanical Spare parts / any other related items	Upto 7.5%	0.05625 lakhs
RE 7	Contingency	Upto 20.0%	0.15 lakhs
RE 8	Books & Journal	Upto 5%	0.0375 lakhs
TOTAL RECU	RRING EXPENDITURE	100.0%	0.75 lakhs

If items RE 1 to RE 4 are not applicable for the scheme/project, the grant can be utilized for item no. RE 6, RE 7 and RE 8 or for item which are specific to the project.

# TECHNICAL SPECIFICATION OF EQUIPMENT (For Non-Recurring Expenditure only)

SI. No.	Name of Equipment & Accessories	Quantity	Details of Technical Specification as indicated/proposed in the e- procurement document
1	PinonDisc	01	<ol> <li>Sliding Velocity - 0.25 to 10m/s</li> <li>Disc rotation Speed - 100 to 2000rpm</li> <li>Normal Load applied (dead weights) - Up to 20Kg</li> <li>Frictional Force measurement Range - Up to 20Kg</li> <li>Wear Measurement Range - +5mm</li> <li>Test duration - 99hrs:59min:59sec</li> <li>Test disc diameter - Ø165mmX9mm</li> <li>Test disc - EN31 with 58-60HRC</li> <li>Wear Track Diameter - 10 to 140 mm</li> <li>Specimen pin Diameter - Ø 4mm to Ø12mm</li> <li>Specimen Pin Length - 25 to 30mm</li> <li>Pin Holders for Ø4 to Ø6,Ø8 to Ø10 and Ø10 to Ø12mm - 1no each</li> </ol>
2	Work station		Intel graphics, 17B,7200 RPM, 2.5 inch, SATA, HDD, 64MB cache Windows 10 pro 11 <sup>th</sup> Generation Intel Core i5

# JUSTIFICATION FOR THE PURCHASE (Applicable only for Non-Recurring Expenditure/ Equipment etc.)

VGST Programme Title	K-Fist L1	*
VGST Grant		Instalment
Amount	Year	No.

Sl. No.	List of the Equipment/ Item * (relevant to carry out the proposed project)	Justification for the Purchase (in brief)
1	Pin On Disc	<ul> <li>All operation in single machine</li> <li>Comprehensive analysis of wear can done for both monolithic and advance materials like composite materials.</li> <li>Provides the information towards the replacement of existing material with the use of advanced materials for the same applications.</li> <li>Encourages material characterization among the advanced materials used in domestic and industrial applications.</li> <li>Decision can be made to ensure reliable, functioning surfaces based on coating and lubricant materials.</li> </ul>
2	Workstation	<ul> <li>Workstation acts as a Interphase with the Pin On Disc Equipment</li> <li>Obtained results can be converted into excel sheet, that will be used for further analysis</li> </ul>

#### (FOR -2<sup>nd</sup> Phase/Year)

BUDGET ESTIMATE - NON - RECURRING EXPENDITURE (NRE)

NRE UNDER Scheme Procurement through E-Tendering Process - ETP (Restricted to Maximum 90%)

(Equipment/Items above Rs.1.00 lakh have to be procured through E-tendering process, which shall have to be entered in

NRE - ETP)

SI. No.	Items permitted to be procured only through E-tender process	Technical Specification of Equipment	Unit Price (Rs.)	Total Unit/ Quantity required	Total Estimated Cost (Rs. in lakhs) (to be approved by VGST)
NRE 1	Tensometer		5,50,000/-	1 No	5.5 Lakhs
NRE					<u>)</u>
2	Vacuum Bag Equipment	d page	1,25,000/-	1 No	1.25 Lakhs
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			NRE - To	tal Amount	Rs. 6.75 Lakhs

## (FOR -2<sup>nd</sup> Phase/Year)

### BUDGET ESTIMATE - NON - RECURRING EXPENDITURE (NRE)

NRE UNDER Scheme\_

Procurement through Manual Tendering Process - MTP

(Restricted to Maximum 90%) (Procurement of Equipment's/ Items below Rs.1.00 lakh only. This is also has to be entered in NRE - MTP)

SI. No.	Items permitted to be procured only through Manual Tender process (Internal Procedure)	Technical Specification of Equipment	Unit Price (Rs.)	Total Unit/ Quantity required	Total Estimated Cost (Rs. in lakhs) (to be approved by VGST)
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			INKE - Tot	tal Amount	Rs.

#### **BUDGET ESTIMATE - RECURRING EXPENDITURE (RE)**

#### (FOR -2<sup>nd</sup> Phase/Year)

(Minimum of 10% shall be allocated)

SI. No.	Items	Percentage of Recurring Expenditure allowed by VGST (Item Wise)	Total Estimated Cost (Rs. In lakhs) (to be approved by VGST)
RE 1	Chemicals		
RE 2	Glassware	Upto 60%	0.45 lakhs
RE 3	Plastic Ware		
RE4	Biological Specimen	an a	
ICL 4	Biological Specimen		
RE 5	Electrical & Electronics spare parts /any other related items	Upto 7.5%	0.05625 lakhs
RE 6	Mechanical Spare parts/ any other related items	Upto 7.5%	0.05625 lakhs
RE 7	Contingency	Upto 20.0%	0.15 lakh
RE 8	Books & Journal	Upto 5%	0.03750 lakh
ΤΟΤΑ	AL RECURRING EXPENDITURE	100.0%	0.75 lakhs

If items RE 1 to RE 4 are not applicable for the scheme/project, the grant can be utilized for item no. RE 6, RE 7 and RE 8 or for item which are specific to the project.

# TECHNICAL SPECIFICATION OF EQUIPMENT (For Non-Recurring Expenditure only)

SI. No.	Name of Equipment & Accessories	Quantity	Details of Technical Specification as indicated/proposed in the e- procurement document
1	Tensometer	01	Test Force Range : 500N (Standard) 50N, 100N, 250N, 1kN, 2kN, 5kN, 10kN (Optional) Test Speed: 1 ~ 500mm/min (Stepless Speed Change) Clamping Way: Pneumatic Specimen Clamp Stroke: 800 mm Instrument Dimension: 850 mm (L) x 700 mm (W) x 1630 mm (H) Power Supply: 220VAC 50Hz / 120VAC 60Hz
2	Vacuum Bag Equipment	1	Model: DZQ-600LO Seal size: 600*8mm Maxi bag width: 580mm Adjustable height of machine head: 740mm-1260mm Material: 304 grade stainless steel Voltage & power: 110V/220V/240V/380V 50HZ/60HZ 1 or 3 phase 0.75-1.2KW Heat system: Single heat system Function: 8 different functions with vacuum, gas flush, seal.

## JUSTIFICATION FOR THE PURCHASE

(Applicable only for Non-Recurring Expenditure/ Equipment etc.)

VG	SST Programme Title		K Fi	st L1 *
	VGST Grant Amount	Y	ear	Instalment No.
SI. No.	List of the Equipment * (relevant to carry out th project)	/ Item e proposed		Justification for the Purchase (in brief)
			•	It is used to test the tensile strength and compressive strength of materials during the research and development phase of a product design. It can be used to determine the varying strengths
	Tensometer		•	loads and tensile strength of a particular material. The universal aspect of this type of testin equipment reflects that it can be used to tes standard tensile and compression on materials components and other structures.
		11 (1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	•	Tensometer are used widely in the manufacturing industry as a way of ensuring that materials and parts meet required safety specification and endurance requirements.
2	Vacuum bag Equipment		•	Vacuum bagging delivers firm, evenly distributed pressure over the entire surface regardless of the type or quantity of material being laminated. Vacuum bagging also gives us the means to
		A Transferraria and A an	lige de la	control excess adhesive in the laminate, resulting in higher fiber-to-resin ratios.

### Summary of Part-A

	1 <sup>st</sup> year	
	List of Non-recurring expenditure	Amount (Rs. in lakhs)
1.	Pin-on-Disc	5.75 lakhs
2.	Work station	1.0 lakhs
	Total	6.75 lakhs
	List of Recurring expenditure	Amount (Rs. in lakhs)
1.	Chemicals, Glasswares, Plastic wares, Biological specimens	0.45 lakhs
2.	Electrical & Electronics spare parts	0.05625 lakhs
3.	Mechanical spare parts	0.05625 lakhs
4.	Contingency, Books & Journals	0.18750 lakhs
	Total	0.75 lakhs
	2 <sup>nd</sup> year	and the second
	List of Non-recurring expenditure	Amount (Rs. in lakhs)
1.	Tensometer	5.5 lakhs
2.	Vacuum Bag Equipment	1.25 lakhs
3.	Total	6.75 lakhs
	List of Recurring expenditure	Amount (Rs. in lakhs)
1.	Chemicals, Glasswares, Plastic wares, Biological specimens	0.45 lakhs
2.	Electrical & Electronics spare parts .	0.05625 lakhs
3.	Mechanical spare parts	0.05625 lakhs
4.	Contingency, Books & Journals	0.18750 lakhs
	Total	0.75 lakh
	GRAND TOTAL (1 <sup>st</sup> year + 2 <sup>nd</sup> year)	15 lakhs

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## Institution/ Principal Investigator and Co- Principal Investigator shall abide by the following VGST Terms & Conditions:

- Procurement for items Rs. 1.00 lakh and above shall be made strictly through E-tendering process using GoK E-portal as per KTTP Act.
- To facilitate hassle free procurement of equipment by the Grantee Institution, VGST desires to be flexible by permitting "Package Approval" instead of "Item-wise Approval" in procurement procedure under non-Recurring grants. Yet, the total Non-Recurring Expenditure shall not exceed specified percentage (90%) of the VGST annual grant. The re-appropriation of the cost/ price of single item shall not exceed 15% of the approved cost.
- \* Further change in the Budget Estimate (Both Non-Recurring & Recurring) will not be entertained.
- For purchase of Items less than Rs.1.00 lakh, minimum 3 quotations have to be taken and to be purchased for the lowest quote.
- The proposal shall include Technical Specification of the Equipment (TSE) and Justification of the Purchase (JPE). This supportive information is most essential for Non-Recurring Budget Estimate (Proposals without TSE & JPE will not be considered for selection).
- ✤ Any deviation from the allocated 15% in Budget Estimate is strictly not allowed.
- The total expenditure towards SI. No. RE 1 to RE 8 shall not exceed the fixed percentage indicated against each item head.

If items RE 1 to RE 4 are not applicable for the scheme/project, the grant can be utilized for item no. RE 6, RE 7 and RE 8 or for item which are specific to the project.

Signature of Principal/Head of Institution Signature of Principal Investigator (With Seal) PRINCIPAL K.S. INSTITUTE OF TECHNOLOGY BENGALURU - 560 109. Signature of Co-PI

Date: 24 2 2022

Place:

## **PURCHASE COMMITTEE**

(APPLICABLE FOR PROCURING ITEMS INDICATED UNDER NON-RECURRING & RECURRING EXPENDITURES OF VGST APPROVED BUDGET ESTIMATE)

Sl. No.	Designation	Name	Signature
1	Principal/Registrar/Dean/Director/ Comptroller	Dr Dilip Kumar K (Principal/Director)	Stremos
2	Principal Investigator	Dr Girish T R	guy
3	Co- Principal Investigator	Mr Ranganath N	Rongantfin
4	Head of the Department (In case, if the PI is also functioning as HOD, HOD of any other dept. can be the member of Purchase Committee)	Dr M Umashankar	Alhoung
5	Manager/ Finance Officer/ Accounts Officer	Mr Keshavan (Manager)	- And
6	Head of the Department (Any other than grantee Dept.)	Dr P N Sudha	Sand

Terms & Conditions of VGST. (VGST-GTC).
The decision, methodology in procurement of the items shall be recorded in the "Proceedings of the Purchase Committee" & shall obtain the signatures of all the members of the purchase committee.

THE PURCHASE COMMITTEE TAKES THE COMPLETE RESPONSIBILITY IN CASE OF ANY ANOMALY/ VIOLATION IS FOUND IN THE PROCUREMENT PROCEDURE.

✤ ANY AUDIT QUERY REGARDING PURCHASE PROCEDURE WILL BE RESPONDED BY THE PURCHASE COMMITTEE.

Change in the members in the Purchase Committee is allowed only if there are any changes in the person holding the respective designations. In such cases, grantee institution should intimate to VGST.



NIRMALA L <nirmalal@ksit.edu.in>

#### Fwd: Proposal Submission Confirmation

1 message

NAGAPRASAD K S <nagaprasadks@ksit.edu.in> To: NIRMALA L <nirmalal@ksit.edu.in> Tue, Sep 6, 2022 at 9:56 AM

------ Forwarded message ------From: **Nagaprasad K S** <<u>nagaprasadks2016@gmail.com</u>> Date: Mon, Feb 28, 2022 at 9:53 AM Subject: Fwd: Proposal Submission Confirmation To: NAGAPRASAD K S <<u>Nagaprasadks@ksit.edu.in</u>>

------ Forwarded message ------From: vgst.donotreply@karnataka.gov.in <vgst.donotreply@karnataka.gov.in> Date: Thu, Feb 24, 2022 at 2:20 PM Subject: Proposal Submission Confirmation To: nagaprasadks <nagaprasadks2016@gmail.com>

Dear Dr. Nagaprasad K S,

Your Proposal has been submitted successfully at Vision Group on Science and Technology Portal

Your Proposal details are as below.

VGST Reference Number	VRN/002163/21-22
Scheme	Karnataka Fund for Infrastructure Strengthening in Science & Technology (K-FIST L2)
Proposal Title	A Study of Regulated and Unregulated toxic emissions of methanol injected GDI Engine adopted with suitable aftertreatment devices

You have attached the below listed documents.

File Name	Document Type	Description
Dr.pdf	Others	Ph.D certificate of Dr. Nagaprasad K S(PI)
CV of Nagaprasad K S.pdf	Others	Resume of Dr. Nagaprasad K S(PI)
List of Publications of Nagaprasad K S.pdf	Others	List of Publications of Nagaprasad K S(PI)
Part A of K FIST L2 of Nagaprasad K S.pdf	Part-A	Part A of K FIST L2 of Nagaprasad K S
Service letter for Nagaprasad KS-KSIT- K FIST L2.pdf	Others	Service letter for Nagaprasad KS-KSIT- K FIST L2
Endorsement from principal KSIT for Dr.pdf	Duly Signed & Scanned Copy of Endorsement from the Head of the College/Institution	Endorsement from principal KSIT for Dr. Nagaprasad KS-K FIST L2
Application form from Dr.pdf	Duly Signed & Scanned Copy of Application Form	Application form from Dr. Nagaprasad KS-K FIST L2

Undertaking from PI and Co PI- Dr.pdf	Duly Signed & Scanned Copy of Undertaking from Principal Investigator And Co-Principal Investigator	Undertaking from PI and Co PI- Dr. Nagaprasad KS-K FIST L2
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Please click on the given below link or copy and paste it in address bar of a web browser to login.

https://vgst.karnataka.gov.in/PPMS/account/login

For further information, you may contact VGST office.

Ph: 080 - 2203 2013

Email: visiongroup.st@gmail.com

Note : This e-mail is an automated notification, which is unable to receive replies.